WHAT IS CLAIMED IS:

Sub
al 1. A method of acquiring a data point of interest on an object, comprising
the steps of:

accepting a command to move a cursor near the data point; and

5   acquiring the data point after the cursor remains near the data point for an
acquisition pause time.

2.   The method of claim 1, wherein the pause time is user-selectable.

10   3.   The method of claim 1, wherein the object is a linear entity.

4.   The method of claim 3, further comprising the step of accepting a
command to move the cursor away from the data point to extend the linear entity.

15   5.   The method of claim 1, wherein the data point is selected from a group
comprising:

an endpoint;

a midpoint;

a node;

20   a closest quadrant point;

an insertion point;

a point on a line tangent to the object; and

a point on a line that forms a normal from the object.

25   6.   The method of claim 1, wherein the step of acquiring the data point
after the cursor remains near the data point for an acquisition pause time comprises
the step of acquiring the data point after the cursor remains within an acquisition
distance of the data point for an acquisition pause time.

7. The method of claim 6, wherein the acquisition distance is determined according to a parameter selected from a group comprising

magnification of a view of the object; and

an object type.

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8. The method of claim 1, further comprising the step of annotating the acquired data point with an acquisition indicator.

9. The method of claim 1, further comprising the step of unacquiring the

10 data point after the cursor remains near the acquired data point for an unacquisition pause time.

10. The method of claim 1, further comprising the steps of:

accepting a command to move the cursor away from near the data point;

15 accepting a command to move the cursor near the data point; and

unacquiring the data point after the cursor remains near the data point for the unacquisition pause time.

11. The method of claim 10, wherein the unacquisition pause time is a

20 different value than the acquisition pause time.

12. The method of claim 1, further comprising the steps of:

accepting a command to move the cursor near a second data point on a second object;

25 acquiring the second data point after the cursor remains near the second data point for the acquisition pause time; and

aligning the first object and the second object according to the acquired first data point and the acquired second data point.

13.   An apparatus for acquiring a data point of interest on an object, comprising:

means for accepting a command to move a cursor near the data point; and

means for acquiring the data point after the cursor remains near the data point

5   for an acquisition pause time.

14.   The apparatus of claim 13, wherein the pause time is user-selectable.

15.   The apparatus of claim 13, wherein the object is a linear entity.

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16.   The apparatus of claim 15, further comprising means for accepting a

command to move the cursor away from the data point to extend the linear entity.

17.   The apparatus of claim 13, wherein the data point is selected from the

15   group comprising:

an endpoint;

a midpoint;

a node;

a closest quadrant point;

20   an insertion point;

a point on a line tangent to the object; and

a point on a line that forms a normal from the object.

18.   The apparatus of claim 13, wherein the means for acquiring the data

25   point after the cursor remains near the data point for an acquisition pause time

comprises the step of acquiring the data point after the cursor remains within an

acquisition distance of the data point for an acquisition pause time.

19.   The apparatus of claim 18, wherein the acquisition distance is determined according to a parameter selected from a group comprising:

magnification of a view of the object; and

an object type.

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20.   The apparatus of claim 13, further comprising means for annotating the acquired data point with an acquisition indicator.

21.   The apparatus of claim 13, further comprising means for unacquiring

10   the data point after the cursor remains near the acquired data point for an

unacquisition pause time.

22.   The apparatus of claim 13, further comprising:

means for accepting a command to move the cursor away from near the data

15   point;

means for accepting a command to move the cursor near the data point; and

means for unacquiring the data point after the cursor remains near the data

point for the unacquisition pause time.

20   23.   The apparatus of claim 13, further comprising:

means for accepting a command to move the cursor near a second data point

on a second object;

means for acquiring the second data point after the cursor remains near the

second data point for the acquisition pause time; and

25   means for aligning the first object and the second object according to the

acquired first data point and the acquired second data point.

24.　A program storage device, readable by a computer, tangibly embodying at least one program of instructions executable by the computer to perform method steps of acquiring a data point of interest on an object, the method comprising the steps of:

accepting a command to move a cursor near the data point; and

5　　　acquiring the data point after the cursor remains near the data point for an acquisition pause time.

25.　The program storage device of claim 24, wherein the pause time is user-selectable.

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26.　The program storage device of claim 24, wherein the object is a linear entity.

27.　The program storage device of claim 26, wherein the method steps

15　further comprise the step of accepting a command to move the cursor away from the data point to extend the linear entity.

28.　The program storage device of claim 24, wherein the data point is selected from the group comprising:

20　　　an endpoint;

a midpoint;

a node;

a closest quadrant point;

an insertion point;

25　　　a point on a line tangent to the object; and

a point on a line that forms a normal from the object.

29.   The program storage device of claim 24, wherein the method step of acquiring the data point after the cursor remains near the data point for an acquisition pause time comprises the step of acquiring the data point after the cursor remains within an acquisition distance of the data point for an acquisition pause time.

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30.   The program storage device of claim 29, wherein the acquisition distance is determined according to a parameter selected from a group comprising:

magnification of a view of the object; and

an object type.

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31.   The program storage device of claim 24, wherein the method steps further comprise the method step of annotating the acquired data point with an acquisition indicator.

15   32.   The program storage device of claim 24, wherein the method steps further comprise the step of unacquiring the data point after the cursor remains near the acquired data point for an unacquisition pause time.

33.   The program storage device of claim 24, wherein the method steps

20   further comprise the steps of:

accepting a command to move the cursor away from near the data point;

accepting a command to move the cursor near the data point; and

unacquiring the data point after the cursor remains near the data point for the unacquisition pause time.

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34.   The program storage device of claim 24, wherein the method steps further comprise the steps of:

accepting a command to move the cursor near a second data point on a second object;

5   acquiring the second data point after the cursor remains near the second data point for the acquisition pause time; and

aligning the first object and the second object according to the acquired first data point and the acquired second data point.

10   35.   A method of unacquiring an acquired data point, comprising the steps of:

accepting a command to move a cursor near the acquired data point; and

unacquiring the data point after the cursor remains near the acquired data point for an unacquisition pause time.

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36.   A method of acquiring a data point of interest on an object, comprising the steps of:

accepting a modifier command; and

acquiring the data point after a command is received to move a cursor near the

20   data point.

37.   The method of claim 36, wherein the data point is acquired after the cursor remains near the data point for an acquisition pause time.